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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,509	09/10/2004	Erwin Welbergen	APO32-04	1140
34758	7590	03/21/2006		
JACK SHORE MUCH SHELIST FREED DENENBERG AMENT&RUBENSTEIN,PC 191 N. WACKER DRIVE SUITE 1800 CHICAGO, IL 60606-1615			EXAMINER VIDWAN, JASJIT S	
			ART UNIT 2182	PAPER NUMBER

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/507,509

Applicant(s)

WELBERGEN, ERWIN

Examiner

Jasjit S. Vidwan

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

Claims 16-31 are pending (Claims 1-15 cancelled by Applicant)

### *Specification*

1. Examiner objects to the specification for not following the proper arrangement of the specification.

More importantly, many of the required elements of the specifications such as "Background of the Invention", "Brief Summary", "and Detailed Description" among others were not titled accordingly.

Examiner kindly requests the Applicant to use the following guidelines that illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC  
(See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

2. Furthermore, Examiner objects to the spacing of the lines in the specification and abstract. The spacing of the lines of the specification is such as to make reading difficult. New application papers with lines 1½ or double spaced on good quality paper are required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 24 reads, "...defining **unacceptable** interaction between a limb and the controllable element..." Examiner fails to understand what would constitute an "unacceptable interaction" between a limb and the controllable element (mouse). For the timely examination of the application, Examiner will construe "unacceptable interaction" to read as any interaction between the controllable element and the limb wherein the limb is in a non-preferred or unhealthy position.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- N.F. 2. Claims 16, 17, 18, ~~20~~, 23, 26, 27, 28, 30, 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Kehlstadt U.S. Pub No: 2002/0093481 [*herein after Kehlstadt*].

3. As per claim 16 and 28, Kehlstadt teaches a system for preventing the maintaining of a sustained cramped motionless position of a limb comprising:

(a) Element providing an input signal controllable by a user through interaction with a user's limb disposed adjacent said element [Page 1, Paragraph 0011, and "input device"]

(b) Timing means for determining the length of time when a limb is present [Page 3, Paragraph 0040, "The presence of finger is indicated by dTf."]

(c) Means coupling the input signal to the timing means such that the timing means is only started when no input signal is being generated [Page 3, Paragraph 0040, "Charge up and charge down times are illustrated with T0 being the amount of time in the absence of a finger"]

(d) Reset every time an input signal is generated [Page 3, Paragraph 0040, Examiner interprets Kehlstadt's teaching as follow: Kehlstadt teaches a system wherein the system keeps track of when the hand is placed on and when it is off. Therefore, if one follows figure 3, it would be noticed that timer is reset every time an input signal is generated (hand placed on the mouse)]

(e) Means for generating an alarm signal when said length of time exceeds a threshold value [Page 3, Paragraph 0011, and "Sleep mode", Examiner construes Kehlstadt's teaching as follow: Sleep mode is defined by Microsoft Computer Dictionary as "A power management mode that shuts down all unnecessary computer operations to save energy after it has received no input or other activity for a specific period of time." Sleep mode is a form of "alarm signal" alerting the user that no activity has occurred over a designated period of time].

4. As per claim 17, Kehlstadt teaches a system wherein there is included a sensor capable of detecting the presence of a limb placed on or over at least a part of said element [Page 1, Paragraph 0011, "detecting the proximity of a user's hand to the housing"].

5. **As per claim 18**, Kehlstadt teaches a system wherein signal comprises a tactile signal [**Page 1, Paragraph 0011**, 'Proximity of user's hand to the housing'].
6. **As per claim 23 and 30**, Kehlstadt teaches a system wherein the alarm signal comprises means for generating a visual signal [**Page 1, Paragraph 0013**, "Providing a message on a computer display"]
7. **As per claim 26 and 32**, Kehlstadt teaches a device for providing an input signal comprising an element controllable by a user by means of interaction with a user's limb, means for detecting activity of the user's limb [**Page 1, Paragraph 0011**, "detecting the proximity of a user's hand to the housing"] and means for generating an alarm signal if no user activity is detected after a period of user activity [**Page 1, Paragraph 0011**, and "Sleep mode", Examiner construes Kehlstadt's teaching as follow: Sleep mode is defined by Microsoft Computer Dictionary as "A power management mode that shuts down all unnecessary computer operations to save energy after it has received no input or other activity for a specific period of time." Sleep mode is a form of "alarm signal" alerting the user that no activity has occurred over a designated period of time].
8. **As per claim 27**, Kehlstadt teaches a device wherein the configuration of the device is adapted to allow the means for detecting activity of the user's limb to detect the activity of a user's limb placed on or over at least part of the element [**Page 1, Paragraph 0011**, "detecting the proximity of a user's hand to the housing"], and means for communicating the signal representative of the detected activity to a controller configured to generate the alarm signal if no user activity is detected after a period of user activity [**Page 1, Paragraph 0011**, and "Sleep mode", Examiner construes Kehlstadt's teaching as follow: Sleep mode is defined by Microsoft Computer Dictionary as "A power management mode that shuts down all unnecessary computer operations to save energy after it has received no input or other activity for a specific period of time." Sleep mode is a form of "alarm signal" alerting the user that no activity has occurred over a designated period of time].

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 19, 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kehlstadt U.S. Pub No: 2002/0093481 [**herein after Kehlstadt**] and further in view of Serpa U.S. Patent No: 6,587,091 [**herein after Serpa**].

11. **As per claim 19 and 29**, Kehlstadt teaches the limitations of claim 18 and 28. However, Kehlstadt fails to teach a system wherein the element includes a member adjacent the limb and disposed adjacent the member is a motor operated eccentric mass that vibrates the member to provide the tactile signal. However, Serpa teaches the limitation wherein the element [see *Serpa*, **Col. 2, Lines 33-38**] includes a member adjacent the limb (mouse) and disposed adjacent the member is a motor operated eccentric mass [see *Serpa*, **Fig. 2a, element 11, 12**] that vibrates the member to provide the tactile signal [see *Serpa*, **Col. 1, Lines 31-34**].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the teachings of Kehlstadt with that of Serpa in order to take advantage of plurality of practical applications such as with computer systems intended for use by the vision or hearing impaired to game systems that enhance a user's experience through force feedback [see *Serpa*, **Col. 1, Lines 37-44**]. It is for this reason that one of ordinary skill in the art at the time of applicant's invention would have been motivated to combine Serpa's teaching with that of Kehlstadt in order to take advantage of numerous applications listed by Serpa [see *Serpa*, **Col. 1, Lines 37-44**].

12. **As per claim 20**, Kehlstadt teaches the limitations of claim 18 however fails to teach a system device wherein the element comprises a mouse housing and the motor operated eccentric mass is located within the housing to vibrate the housing, thus causing the tactile signal. However, Serpa teaches

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a system wherein the element comprises a mouse housing and the motor operated eccentric mass is located within the housing to vibrate the housing, thus causing the tactile signal [See Serpa **Fig. 3a**, **elements 11 - motor, 19 -housing**].

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the teachings of Kehlstadt with that of Serpa in order to take advantage of plurality of practical applications such as with computer systems intended for use by the vision or hearing impaired to game systems that enhance a user's experience through force feedback [see Serpa, **Col. 1, Lines 37-44**]. It is for this reason that one of ordinary skill in the art at the time of applicant's invention would have been motivated to combine Serpa's teaching with that of Kehlstadt in order to take advantage of numerous applications listed by Serpa [see Serpa, **Col. 1, Lines 37-44**].

13. **Claims 22 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kehlstadt U.S. Pub No: 2002/0093481 [**herein after Kehlstadt**].

In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) where the court held that the configuration of the claimed disposable plastic nursing container was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant. (Particular **type of alarm** is significant)

14. Kehlstadt discloses the claimed invention of claim 16 and 28, except that Kehlstadt teaches an alarm signal comprising means for generating a visual signal [**Page 1, Paragraph 0013**, "Providing a message on a computer display"] instead of audible alarm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select any known type of alarm signal as deemed suitable and would be well within the level of ordinary skill in the art in order to provide plurality of settings for an alarm signal as even demonstrated by Kehlstadt's teaching of activating a light in the mouse in addition to providing a message on a computer screen as means of an alarm signal. This is further demonstrated by applicant's various embodiments of the alarm signals as claimed absent persuasive evidence that the particular type of signal is significant.



15. Claims 21, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kehlstadt U.S. Pub No: 2002/0093481 [**herein after Kehlstadt**] and further in view of Gould et al U.S. Patent No: 6,065,138 [herein after Gould].

16. **As per claim 21**, Kehlstadt teaches the limitations of claim 16, however fails to teach a system wherein the alarm signal has multiple settings whereby the nature of the alarm signal changes if the presence of the limb continues to be detected after the alarm signal has initially been generated.

However, Gould teaches a system wherein the alarm signal has multiple settings whereby the nature of the alarm signal changes if the presence of the limb continues to be detected after the alarm signal has initially been generated. [See Gould, **Col. 2, Lines 13-20**].

One of ordinary skill in the art at the time of Applicant's invention would have clearly recognized the advantage of combining Gould's teaching with that of Kehlstadt in order to take advantage of the ability to provide safe working environment where by reducing the repetitive stress injury to the user by using increased level of alarm intensities. It is for this reason one of ordinary skill in the art would have been motivated to combine the two teachings in order to reduce the RSI injury to the user by using increased levels of alarm intensities.

17. **As per claim 24**, Kehlstadt teaches the limitations of claim 16. However, Kehlstadt fails to disclose a system wherein the system includes a risk profile defining unacceptable interaction between a limb and the controllable element and means for generating the alarm signal if the nature of the interaction conforms to the risk profile. However, Gould teaches a system that includes a risk profile defining unacceptable interaction between a limb and the controllable element [see Gould, **Col. 1, Lines 14-17**] and means for generating the alarm signal if the nature of the interaction conforms to the risk profile [see Gould, **Col. 2, Lines 13-20**].

One of ordinary skill in the art at the time of Applicant's invention would have clearly recognized the advantage of combining Gould's teachings with that of Kehlstadt in order to take advantage of preventing Repetitive stress injury (RSI) that can be caused by excessive typing and bad hand position among other activities [see Gould, **Col. 1, Lines 27-25**]. It is for this reason that one of ordinary skill in the

art would have been motivated to combining Gould's teachings with Kehlstadt's disclosed invention in order to prevent unhealthy hand posture, which could cause RSI [see Gould, Col. 1, Lines 27-25].

18. **As per claim 25**, Teachings of Kehlstadt as modified by Gould above teach a system including means for compiling and storing a record of the interaction between the user-controllable element and the users limb and the generation of alarm signals over a period of time [see Gould, Col. 2, Lines 13-20].

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasjit S. Vidwan whose telephone number is (571) 272-7936. The examiner can normally be reached on 8am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KIM HUYNH can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JSV  
2/17/2006



**KIM HUYNH**  
**SUPERVISORY PATENT EXAMINER**

2/21/06